

**AMENDMENTS TO THE CLAIMS**

1. (Previously Presented) A medium for a scintillation assay, said medium comprising:  
a solid body comprising a first scintillator material, wherein the first scintillator material is a fluorescent Coumarin dye having a Stokes shift of at least 50 nm, wherein the fluorescent emission of the solid body comprising the first scintillator material is in the range of 460-500 nm.

2. (Canceled)

3. (Original) The medium of claim 1, wherein said dye has a Stokes shift of at least 100 nm.

4. (Original) The medium of claim 1, wherein said medium further includes a second scintillator material.

5. (Original) The medium of claim 4, wherein said second scintillator material is selected from the group consisting of: PPO, bis-MSB, DPA, and combinations thereof.

6. (Previously Presented) The medium of claim 1, wherein said solid body is a solid polymer bead having said Coumarin dye incorporated therein.

7. (Original) The medium of claim 6, further including BiBuQ incorporated therein.

8. (Canceled)

9. (Previously Presented) A method for carrying out an assay for detecting or quantifying a radio nuclide emission, said method comprising the steps of:

providing a scintillation medium comprising a solid body which contains a first scintillator material which is a Coumarin dye having a Stokes shift of at least 50 nm, wherein the

fluorescent emission of the solid body which contains a Coumarin dye is in the range of 460-500 nm;

contacting said scintillation medium with an analyte suspected of having said radionuclide therein; and

detecting any scintillation caused in said medium by said radionuclide.

10. (Canceled)

11. (Original) The method of claim 9, wherein said Coumarin dye has a Stokes shift of at least 100 nm.

12. (Previously Presented) The method of claim 9, wherein said solid body is selected from: a polymer bead and a vessel for retaining a liquid scintillation.

13. (Canceled)

14. (Original) The method of claim 9, wherein said scintillation medium further includes a second scintillator material.

15. (Original) The method of claim 14, wherein said second scintillator material is selected from the group consisting of: PPO, bis-MSB, DPA, BiBuQ, and combinations thereof.

16. (Previously Presented) A solid state member for a scintillation proximity assay, said member comprising:

a polymeric material having a first scintillator material which is a fluorescent Coumarin dye incorporated therein, said Coumarin dye further characterized in that it has a Stokes shift of at least 50 nm, wherein said solid state member has a fluorescent emission in the range of 460-500 nm.

17. (Canceled)

18. (Original) The member of claim 16, wherein said dye is further characterized in that it has Stokes shift of at least 100 nm.

19. (Original) The member of claim 16, wherein said Coumarin dye is selected from the group consisting of Coumarin 153, Coumarin 152, and combinations thereof.

20. (Original) The member of claim 16, further including a second scintillator material therein.

21. (Original) The member of claim 20, wherein said second scintillator material is selected from the group consisting of: PPO, bis-MSB, DPA, BiBuQ, and combinations thereof.

22. (Original) The member claim 16, wherein said polymeric material is configured as a bead.

23. (Original) The member of claim 16, wherein said polymeric material is configured as a vessel for retaining a liquid.

24. (Original) The member of claim 16, wherein said polymeric material is applied to the surface of a vessel configured to retain a liquid.

25. (Previously Presented) A liquid scintillation cocktail comprising:  
a first scintillator material which is a fluorescent Coumarin dye having a Stokes shift of at least 50 nm; a second scintillator material selected from the group consisting of: PPO, bis-MSB, DPA, combinations thereof; and  
a solvent for said first and second scintillator materials, wherein said liquid scintillation cocktail has a fluorescent emission in the range of 460-500 nm.

26. (Canceled)

27. (Original) The liquid scintillation cocktail of claim 25, wherein said Coumarin dye is further characterized in that has a Stokes shift of at least 100 nm.